

In the abstract:

Disclosed herein are power conditioning systems for providing filtered, clean and reliable power to sensitive electrical or electronic loads and further to provide battery backed power to those loads. Further ~~disclosed~~ disclosed herein are such power conditioning systems for supplying clean power to security scanning equipment and to infant life support devices. One of the systems disclosed herein supports a 30kVA combined load and includes a cabinet, a passive input circuit receiving three phase AC power, an AC to DC converter including a 12 pulse rectifier, a regulating DC to DC converter, a high frequency DC to AC inverter utilizing PWM at 50 kHz, an output passive filter, two banks of batteries permitting hot-swappable battery replacement and capable of supplying power for at least 10 minutes at full capacity load.